#### **REMARKS**

This is in response to the USPTO Office Action of March 20, 2006. Reconsideration of the rejections in the office action is respectfully requested. Claims 1, 8-11, 13-16, 19-22, 25-29, 31 and 33 remain in the application and new claims 34-47 are added to the application after this amendment is entered.

## I. THE OFFICE ACTION

Claims 1-6, 9-11, 13-15, 16, 19-21, 25, 27, and 30-33 stand rejected under 35 U.S.C. § 103(a) for obviousness over U.S. Patent No. 6,611,735 to Henly et al. (Henly).

Claims 7, 8, 12, 17, 23, 24, 26, 28, and 29 stand rejected under 35 U.S.C. § 103(a) for obviousness over Henly in view of U.S. Published Patent Application No. 2003/0084791 to Trenhaile et al. (Trenhaile).

Claims 18 and 22, in combination with a corresponding base claim and any intervening claims, are identified as being directed to allowable subject matter.

## II. THE ART REJECTIONS

#### Henly is Non-Analogous Art in Relation to the Claims.

In rejecting a claim as obvious, analogous art, not non-analogous art, is to be considered. In re Oetiker, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). Indeed, as stated in the Manual of Patent Examining Procedure: "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

In the present case, the field of endeavor is in the plastic blending art and more specifically, the blending of recycled plastic component powders into blended plastic materials. In contrast, the field of endeavor of the Henly is petroleum blending. One of ordinary skill in the plastic blending art would **not** look to either the petroleum blending art for guidance in optimizing the blending of recycled plastic powders to achieve a desired plastic material. Accordingly, with respect to the first prong of the test enunciated in <u>Oetiker</u>, the Henly patent is non-analogous art.

In determining whether the Henly patent is reasonably pertinent to the problem that concerned Applicant, it is important to look at the purpose of Applicants' invention and the purpose for the inventions recited in the applied reference. <u>In re Clay</u>, 23 USPQ 2d 1058 (Fed Cir. 1992). If the purposes of the two are different, one of ordinary skill in applicant's art would not be motivated to consider the applied reference. <u>Id</u> at 1061.

The purpose behind applicant's invention is to provide several alternative plastic component combinations that meet a desired blended plastic material specification. By providing alternative plastic component combinations, the invention facilitates selection of an optimal combination of plastic components based on one or more factors such as inventory of component powders or product characteristic. In contrast, the primary purpose behind the method described in the Henly patent is increasing the predictability and profitability of operations (col 1, lines 13-14). Therefore, the invention and reference are from two different fields and solve two different problems. Thus, it would be unreasonable to characterize the Henly patent as prior analogous art. Since the Henly patent is not analogous art, it is not a proper reference. Based on the foregoing, it is respectfully requested that the §103 rejections to the pending claims be withdrawn.

#### Claims 1-6, 9-11, 13-15, 16, 19-21, 25, 27, and 30-33 Patentably Distinguish Over Henly.

Henly does not disclose or fairly suggest "a method for determining plastic components of a blended plastic material" that includes "processing the supply data and the specification data to determine a plurality of different combinations of plastic components that may produce the blended plastic material having the at least one desired characteristic" (i.e., third element), "determining, for each combination, a preferred percentage of each of the plastic components of the combination" (i.e., fourth element), or "reporting at least one selected combination and the corresponding preferred percentages" (i.e., fifth element) as recited in claim 1. Rather, Henly discloses "methods of predicting and optimizing production" that can calculate the required feedstock to manufacture a product given the product characteristics or, alternatively, determine what products may be produced from the feedstock on hand. (col. 15, lines 27-32)

The USPTO's rejection of claim 1 relies on col. 9, lines 1-12; col. 15, lines 14-19; and col. 11, lines 38-40 for support with respect to the third element of the claim. However, col. 9, lines 1-12 merely discloses "accurate prediction of the properties of the resultant output product"

based on properties relating to components of the product. Presenting the reversal, col. 15, lines 14-19 discloses calculating the required input ingredients (e.g., cetane improver) after selecting an "appropriate" method (e.g., Methods 1-5) based on the product specification data (e.g., Ethyl API, T50, T90, AnPt, Visc., Cloud, Arom, T10) available. Col. 11, lines 38-40 merely states that "this method allows the calculation of cetane numbers of the product from the properties of the components, and does not rely on the cetanes." This again discloses calculation a product characteristic (i.e., cetane number) given properties of components of the product.

Additionally, the USPTO's rejection of claim 1 relies on col. 9, line 65 - col. 10, line 68 for support with respect to the fourth element of the claim. However, col. 9, line 65 - col. 10, line 68 merely discloses product characteristics (e.g., CN, T90, T50, T10, ANPT, VISC40, D976, CLOUD, SPGR, and FIAAROM) and an input component characteristic (e.g., cetane improver (x)) in a set of non-linear calculations (e.g., CN 0, CN 1000, CN 2500, CN 5000, CN 7500, and CN 10000) for three models (e.g., MODEL 1, MODEL 2, and MODEL 3). MODEL 1 is used, for example, when T90, ANPT, VISC40, D976, and CLOUD product characteristics are available. MODEL 2 is used, for example, when T50, T90, SPGR, FIAAROM, and CLOUD product characteristics are available. MODEL 3 is used, for example, when T10, T50, T90, SPGR, and CLOUD product characteristics are available. The non-linear calculations can be solved for cetane number (CN), a resulting product characteristic, when the amount of cetane improver (x), an input component, is known. In the reversal, the non-linear calculations can be solved for the amount of cetane improver (x), an input component, when the required cetane number (CN), a resulting product characteristic, is known.

The USPTO's rejection of claim 1 also relies on col. 7, line 57 and col. 8, lines 1-3 for support with respect to the fifth element of the claim. However, col. 7, line 57 merely discloses that the raw materials may be virtually any raw material and col. 8, lines 1-3 merely discloses that each applicable industry will have its own known methods which result in known products.

Based on the foregoing, Henly does not disclose or fairly suggest the method recited in claim 1. Accordingly, the applicants respectfully submit that independent claim 1 and claims dependent thereon (e.g., claims 2-6, 9-11, 13-15, 16, and 19-21) are currently in condition for allowance.

As stated above, claims 2-6, 9-11, 13-15, 16, and 19-21 are distinguished from Henly for at least the same reasons stated above distinguishing claim 1. Nevertheless, applicants reserve

the right to present additional reasons for distinguishing claims 2-6, 9-11, 13-15, 16, and 19-21 from Henly.

Claim 25 is distinguished from Henly for at least the same reasons stated above distinguishing claim 1. Accordingly, the applicants respectfully submit that independent claim 25 and claims dependent thereon (e.g., claim 27) are currently in condition for allowance.

As stated above, claim 27 is distinguished from Henly for at least the same reasons stated above distinguishing claim 25. Nevertheless, applicants reserve the right to present additional reasons for distinguishing claim 27 from Henly.

Additionally, claims 30-33 are distinguished from Henly for at least the same reasons stated above distinguishing claim 1. Accordingly, the applicants respectfully submit that independent claims 30-33 are currently in condition for allowance.

# Claims 7, 8, 12, 17, 23, 24, 26, 28, and 29 Patentably Distinguish Over the Combination of Henly and Trenhaile.

Claims 7, 8, 12, 17, 23, and 24 depend from claim 1. Accordingly, these dependent claims are distinguished from Henly for at least the same reasons stated above distinguishing claim 1. Additionally, as stated by the USPTO, Henly does not disclose the limitations of Claims 7, 8, 12, 17, 23, and 24. Further, neither Henly nor Trenhaile discloses or fairly suggests "sorting the selected combinations according to a cost associated with each selected combination" as recited in claim 7; determining either a preferred percentage of each plastic component for at least one combination or determining alternative percentages for the plastic components of at least one combination as recited in claim 8; "an indicator of available volume" or "determining a maximum volume of the blended plastic based on the available volume and percentage of each plastic component" as recited in claim 12; or performing the processing and determining of claim 1 on a remote computer as recited in claim 17.

The USPTO's rejection of claim 7 relies on FIG. 9A of Trenhaile. However, FIG. 9A shows an example of a blend history display with a table of mixes associated with a selected flour grade (e.g., A\_ZZ) (paragraphs 32 and 69). The table includes columns labeled "Mix #", "Grade," and "Savings." Each row includes certain information associated with a certain mix (i.e., Mix #). The "Savings" column reflects a dollar amount representing savings for the

corresponding mix over a standard mix cost (para. 58). Notably, the table is not sorted in relation to the "Savings" column.

Based on the foregoing, neither Henly nor Trenhaile discloses or fairly suggests "sorting the selected combinations according to a cost associated with each selected combination" as recited in claim 7. Accordingly, the applicants respectfully submit that dependent claim 7 is also currently in condition for allowance with respect to the combination of Henly and Trenhaile.

The USPTO's rejection of claim 8 relies on paragraphs 55-57 of Trenhaile. These paragraphs describe FIG. 4. However, neither paragraphs 55-57 nor FIG. 4 discloses or fairly suggests determining either a preferred percentage of each plastic component for each combination (i.e., independent claim 1) or determining alternative percentages for the plastic components of each combination as recited in claim 8. Accordingly, the applicants respectfully submit that dependent claim 8 is also currently in condition for allowance with respect to the combination of Henly and Trenhaile.

The USPTO's rejection of claim 12 relies on FIG. 7 of Trenhaile. However, FIG. 7 does not disclose or fairly suggest "an indicator of available volume" or "determining a maximum volume of the blended plastic based on the available volume and percentage of each plastic component" as recited in claim 12. Accordingly, the applicants respectfully submit that dependent claim 12 is also currently in condition for allowance with respect to the combination of Henly and Trenhaile.

The USPTO's rejection of claim 17 relies on paragraph 42 of Trenhaile. However, paragraph 42 merely discloses a blend processing system 100 connected to a remoter server 118 via a network 116. The remote server 118 includes current grain cost card data 114 the provides current commodity price information (i.e., a parameter associated with components to be blended). Notably, paragraph 42 does not disclose or fairly suggest performing the processing and determining of claim 1 on a remote computer as recited in claim 17. Accordingly, the applicants respectfully submit that dependent claim 17 is also currently in condition for allowance with respect to the combination of Henly and Trenhaile.

Claims 26, 28, and 29 depend from claim 25. Accordingly, these dependent claims are distinguished from Henly for at least the same reasons stated above distinguishing claim 25. Additionally, as stated by the USPTO, Henly does not disclose the limitations of Claims 28 and 29.

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The applicants reserve the right to present additional reasons for distinguishing claims 23 and 24 from Henly and Trenhaile, individually or in combination. The applicants reserve the right to present additional reasons for distinguishing claims 26, 28, and 29 from Henly and Trenhaile individually or in combination.

### **CONCLUSION**

Based on the foregoing remarks, the applicants believe that all of the claims in this application (i.e., claims 1, 8-11, 13-16, 19-22, 25-29, 31, 33 and 34-47) are in condition for allowance and an indication to that effect is earnestly solicited. Furthermore, if the USPTO believes that additional discussions or information might advance the prosecution of this application, the USPTO should feel free to contact the undersigned at the telephone number indicated below.

Respectfully submitted,

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